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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/560,057

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03/18/2008

EXAMINER

ONEILL, KARIE AMBER

ART UNIT

PAPER NUMBER

1795

MAIL DATE

DELIVERY MODE

03/18/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/560,057	Applicant(s) GLAUNING ET AL.	
	Examiner Karie O'Neill	Art Unit 1795	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 December 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 5-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 5-10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08 December 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. The Applicant's amendment filed on December 18, 2007, was entered. Claims 1-4 have been cancelled. Claims 5-10 have been added. Therefore, Claims 5-10 are pending in this office action.

Claim Rejections - 35 USC § 112

2. The rejection of Claim 2, under 35 U.S.C. 112, second paragraph, has been overcome by the cancellation of the claim and because the explanation of the term "form-locking" is acceptable and clarifies the indistinctness.

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claim 10 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. It is unclear from the specification what "located in a nip" means.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

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(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claims 5-10 are rejected under 35 U.S.C. 102(e) as being anticipated by Shimma (US 6,566,005 B1).

With regard to Claim 5, Shimma et al. discloses in Figures 2 and 5, a battery pack (1), comprising a housing made of an outer enclosure (2) and an inner case (13); a plurality of battery cells (14) located in said housing, arranged in four rows of five cells each (column 5 lines 18-20) and having longitudinal axes; and a heat diffusion means formed from the wall of the inner case (13) surrounding the battery cells (14) and defining first air passages (24) within the outer enclosure (2) and communicates with a second passage (25) which is closed off from the interior of the housing (2) (column 5 lines 66-67 and column 6 lines 1-6). Shimma et al. discloses in Figure 3, the air passages (24, 25) extend parallel to said longitudinal axes of the battery cells, because it can be seen that the passages (24, 25) are parallel to the cells (14) in the center region of the cells (14). The phrase "for a heat-diffusing medium" imparts intended use to the structural features of the ducts. Therefore, while it has been considered, it is not given patentable weight. While features of an apparatus may be recited either structurally or functionally, claims directed to an apparatus must be distinguished from the prior art in terms of structure rather than function. *In re Schreiber*, 128 F.3d 1473, 1477-78, 44 USPQ2d 1429, 1431-32 (Fed. Cir. 1997.) A claim containing a "recitation with respect to the manner in which a claimed apparatus is intended to be employed

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does not differentiate the claimed apparatus from a prior art apparatus" if the prior art apparatus teaches all the structural limitations of the claim. *Ex parte Masham*, 2 USPQ2d 1647 (Bd. Pat. App. & Inter. 1987.)

With regard to Claim 6, Shimma et al. discloses in Figure 5, wherein said at least one duct or air passage (25) is shaped such that its wall rests against the battery cells (14) adjacent to it. Radiator plates (22) conform to the projections and recesses of the corresponding surfaces of each row of cells (14), in a form-locking fashion, forming the perimeter of the cell groups (14) and the perimeter of the duct or second air passage (25) (column 5 lines 44-55).

With regard to Claims 7 and 9, Shimma et al. discloses wherein the wall regions of the at least one duct or air passages (25) include at least partly heat-conducting material. Shimma et al. discloses wherein the radiator plates for the perimeter of the air passage (25) and are made from a material which allows the radiator to be a heat-preventing plate (column 5 lines 63-65), and the radiator plates (22) are formed so as to conform to the protrusions and recesses of the outer surfaces of the battery cells (14), providing contact with the cells (14), causing heat generated by the cells to be transferred evenly to the radiator plates (22), reducing irregularity in the cooling effect of the cells (column 9 lines 3-8). It can be seen in Figures 2 and 3, the radiator plates extend over a large area of the battery cells (14).

With regard to Claim 8, Shimma et al. discloses in Figure 5, wherein said wall regions of said at least one duct, formed by the radiator plates (22) made of heat-conducting material which form the air passage (25), are located in the center of the

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battery pack (1) and are recessed so far from the outer wall regions of said housing (2) that contact with said heat-conducting material by a user is prevented.

With regard to Figure 10, Shimma et al. discloses in Figure 5, wherein the at least one duct or air passage (25) is located "in a nip" between individual ones of said battery cells (14). This can be seen in the figure where the air passage (25) runs between the two packs of battery cells and between the two individual end cells on the far right of the figure. The phrase "in a nip" is unclear and for the sake of compact prosecution is considered to be "in an area" between the individual battery cells.

Response to Arguments

7. Applicant's arguments filed December 18, 2007, have been fully considered but they are not persuasive.

Applicant's principal arguments are:

(a) Shimma et al. does not disclose at least one duct which extends parallel to the longitudinal axes of the battery cells.

In response to Applicant's arguments, please consider the following comments:

(a) Figure 3 of the Shimma et al. reference shows the duct or air passage (25) extending parallel to said longitudinal axes of the battery cells (14) in a center portion of the battery cells (14). The air passage (25) runs parallel to a portion of each of the cells (14) in a longitudinal direction. The air passage (25) also runs in a direction from one side of the battery case to the other side of the battery case in a

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perpendicular direction, but covers the majority of the longitudinal axes of the battery cells.

Conclusion

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Karie O'Neill whose telephone number is (571)272-8614. The examiner can normally be reached on Monday through Friday from 8am to 5pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick Ryan can be reached on (571) 272-1292. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Karie O'Neill
Examiner
Art Unit 1795

KAO

/Mark Ruthkosky/
Primary Examiner, Art Unit 1795